

HAJDUSKA, Kurt, fomernok

Automation as reflected in this year's industrial fairs. Meres automat
9 no.11:348-349 '61.

1. Ganz Arammerogyar.

HAJDUSKA, Kurt

Concentration of operations in manufacturing component parts.
Meres automat 9 no.1:17-22 Ja '61.

1. Fomernok, Ganz Aranmerogyar

HAJECK, M.

Meeting of the Technical Council of Nonferrous Metal Foundries in Czech
Motorcycle Works in Strakonice. p. 109.

SLEVARENSTVI. (Ministersivo tezkeho strojirenstvi a Cheskoslovenska vedecka
technicka spolecnost pro hutnictvi a slevarensivi). Praha, Czechoslovakia,
Vol. 7, no. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 7, July 1959
uncla.

MUSIL, Y. [Musil, J.]; KAFKA, V.; GAYEK, A. [Hajek, A.]; NOVOTNY, A.;
PADOVETS, Y. [Padovec, J.]; PAVLOVSKA, Y. [Pavlovska, J.]

Study of the effectiveness of various doses of 6-azauridine
in malignant tumors of female genitalia. Vop. onk. 10 no.3:62-66
'64. (MIRA 17:8)

1. Biokhimicheskoye otdeleniye fakul'tetskoy bol'nitsy, Praga,
10 (zav. - Y. Opplt [J. Opplt]) i akushersko-ginekologicheskoy
kliniki gigiyenicheskogo meditsinskogo fakul'teta Karlova
universiteta, Praga, 10 (zav. - dotsent I. Padovets [Padovec]).

HAJEK, Alois

Pay more attention to the collection and processing of bones. From
potravin 15 no.3:121-123 Mr '64.

1. Research Institute of Meat, Brno.

HÁJEK, Alois

Use of the linear programming method. Prum potravin 15 no. 7:
321-325 J1 '64.

1. Research Institute of Meat, Brno.

KRAKORA, B.; HAJEK, A.

Preliminary considerations on psycho-prophylactic preparations in obstetrics according to Platonov and Velvovsky. Prakt. lek., Praha, 32 no. 24:554-556 20 Dec 1952. (CJML 23:5)

12-J.F., 1.

Efficiency in the water management. n. 11.
(ZOH. Vol. 3, no. 1, sept. 1957, Praha, Czechoslovakia.)

SO: Monthly List of East European Acquisitions (ZAL) 10. Vol. 3, no. 1, no. 197.
Incl.

HAVEK, A.

How to accelerate the application of automation in the
water resources management. Vcdni hosp 14 no.5:200 '64.

SNAJD, V., prof.; ANTOS, J.; LUKAS, V.; BOUDA, J.; BARDOS, A.; MANKA, J.;
HAJEK, A.; PACIN, Z.; SKACEL, K.; STIKSA, E.; SIKL, O.; SKODA, V.

Clinical aspects of carcinoma of the endometrium. Cesk. gynek. 27
no.3:173-177 Ap '62.

1. I gyn. klin. fak. vseob. lek. KU v Praze, prednosta prof. MUDr.
K. Klaus.

(UTERUS NEOPLASMS)

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HAJEK, B.

D.I. Mendeleev and B. Hrauner. p. 139
(SEORNIK PRO DEJINY PŘÍRODNÍCH VĚD A TECHNIKY, vol. 1954, Praha)

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 11,
Nov. 1955, Uncl.

4079
THE PREPARATION OF METALLIC SCANDIUM IN COMPACT STATE. F. Petrá, D. Hájek, and V. Procházka
Translated from Chem. listy 50, 2025 (1956). 2p.

Metallurgical scandium has not yet been prepared in a compact state. In 1937 Fischer and coworkers obtained a preparation by electrolysis of scandium chloride which was sponge-like in appearance, almost grey in color, fragile and hard. Sommer and Kohnmann, who used the reduction of scandium chloride by potassium, obtained only a small amount of a mixture of powdered scandium and potassium chloride. In the experiments reported, scandium fluoride or chloride were reduced by calcium for the preparation of metallic scandium. The reaction was performed in a molybdenum crucible heated in an argon atmosphere in a high-frequency induction oven. The reaction, which began at the temperature of 100 to 200°C, was very violent and took place within a short length of time. The metallic scandium was separated by distillation by further heating to 1500°C (under pressure 10^{-4} mm Hg). It was obtained in a compact state, as a silvery, comparatively soft metal which tarnishes in air. Its identity and purity were confirmed by chemical and spectral analysis. (auth)

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their
Application. Elements. Oxides. Mineral Acids. Bases.
Salts. II

Abstr Jour: Ref Zhur-Khim., No 3, 1959, 28042.

Author : Petru, F., Hajek, B., and Prochazka, V.

Inst :
Title : Industrial Scale Production of Scandium and Scandium
Compounds.

Orig Pub: Chem Prumysl, 7, No 5, 230-232 (1957) (in Czech with
English and Russian summaries)

Abstract: Live steam is passed into a mixture of 850 kg of
the residue remaining after the processing of Zin-
wald tungstenate and 1700 liters conc HCl until the
volume of the mixture reaches 2500 liters. To each
1000 liters of the solution thus obtained 120 liters

Card : 1/2

159

HAJEK, B.

A conference on inorganic chemistry in Libice.

P. 493 (Chemicky Prumysl. Vol.7, no. 9, Sept. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

HAJEK, B.

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Distr: 4E20(j)/4E3d

Preparation of addition compounds of anhydrous scandium chloride and scandium bromide with alcohols. F. Petrá, B. Hajek, and F. Jirá (Chem. Technol. Hochschule, Prague). *Chem. Abstr.* 29, 487-80 (1987) (in German).

A no. of solid, well defined, addn. compds. of different additivity degrees was prepd. by treating anhyd. ScCl_3 and ScBr_3 with MeOH , EtOH , PrOH , BuOH , pentanol, hexanol, benzyl alc., allyl alc., iso- PrOH , and cyclohexanol vapors under varying pressure. The compn. of the compds. is given by the general formula $\text{ScX}_3 \cdot n\text{ROH}$, with n being (to one exception) always integral. N. Plavšić

RS JJJ

H A J E K, B O H U M I L

The size of the crystals is estimated to be of the order 10^{-4} to 10^{-5} cm according to x-ray measurements. M. Hunkeler

M-7-

HAJEK, B.

Contributions to the chemistry of the rare elements. III. Preparation of metallic scandium in a compact state.

p. 672 (CHEMICKÉ LISTY) Vol. 51, no. 4, Apr. 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

HAJEK, B.

CZECHOSLOVAKIA / Inorganic Chemistry. Complex
Compounds.

C

Abs Jour: Ref Zhur-Khimiya, No 19, 1958, 63979

Author : Petru F, Procházka V, Hajek B

Inst : Not given

Title : On the Chemistry of the Rarer Elements. III.
The Extraction of Scandium in a Compact State.

Orig Pub: Collect. Czechosl. chem. commun, 1958, 23,
No 3, 367-371

Abstract: See RZhKhim, 1958, 28159.

Card 1/1

①
Z/508/60/000/000/003/018
E075/E335

AUTHORS: Bárta, Čestmír, Petrů, František and Hájek, Bohumil.
TITLE: Synthesis of scandium-oxide single crystals
SOURCE: III. Konference o monokrystalech. Prague, Výzkumný
ústav pro minerály, 1960. 17 - 19

TEXT: The authors succeeded in synthesizing scandium oxide by a hitherto unpublished method from spectroscopically pure Sc_2O_3 of an open structure. The synthesis was carried out on the Verneuil principle of crystallizing from the melt with equipment used for the commercial manufacture of corundum single crystals. To produce single crystals a reducing (hydrogen) atmosphere was needed. The linear rate of growth is of the order of 8 mm/h. The melting point is estimated at 2300 °C. The largest single crystal produced so far is 45 mm long and 4 mm wide. The product obtained was clear and dense, of 3.91 g/cm³ density and with a hardness of 6.5 according to Moh's scale, refractive index 1.91. X-ray and γ-ray radiation produce a sufficiently strong luminescence which still persists at a temperature of about 100 °C; the emitted light is white with a pinkish hue. Further work is being continued.
Card 1/2

Z/508/60/000/000/003/018
E073/E335

Synthesis of

ASSOCIATIONS: Výzkumný ústav pro minerály v Turnově
(Minerals Research Institute, Turnov)
Katedra anorganické chemie na Vysoké škole
chemickotechnologické, Praha
(Chair of Inorganic Chemistry of the University
for Chemical Technology, Prague)

Card 2/2

HAJEK, B.

National seminar on inorganic chemistry in Pardubice. Chem
prum 12 no.3:144 Mr '62.

1. Katedra anorganické chemie, Vysoká škola chemickotechnologická,
Praha..

HAJEK, Bohumil

Seminar on the development of inorganic chemistry. Chem
prum 12 no.7:366 J1 '62.

1. Vysoka skola chemicko-technologicka, Praha.

HAJEK, B.

"A short history of chemistry" by J. R. Partington. Reviewed by E. Hajek. Chem prum 12 no. 12:679-680 D '62.

1. Vysoka skola chemicke-technologicka, Praha.

HAJEK, Bohumil

"General chemistry and outline for inorganic chemistry"
by P. Colmant. Reviewed by Bohumil Hajek. Chem prum
13 No.2:96 F '63.

1. Vysoka skola chemicko-technologicka, Praha.

HAJEK, B.

"Synthetic inorganic chemistry" by William L. Jolly. Reviewed
by B. Hajek. Chem prum 13 no.5:264 My '63.

1. Vysoka skola chemicko-technologicka, Praha.

HAJEK, B.
GAYYEK, B. [Gajek, B.]; PROSHEK, Fr. [Prosek, F.]

Formation of zinc (I) chloride in the course of chemical transport
reaction in the system $\text{Zn} - \text{ZnCl}_2$. Zhur. neorg. khim. 9 no.2:
469-470 F'64. (MIRA 17:2)

1. Kafedra neorganicheskoy khimii, Khimiko-tekhnologicheskiiy
institut v Prage.

HAFEK, Bohumil

Symposium on the structure and properties of coordination compounds in Bratislava. Chem prum 15 no.1:46 Ja 195.

1. Higher School of Chemical Technology, Prague.

HASEK, B.

CZECHOSLOVAKIA

PETRU, F.; BROZEK, V.; HASEK, B.

Institute for Inorganic Chemistry, Higher Technical School for Chemistry
(Institut für anorganische Chemie, Technische Hochschule für Chemie)
Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 2, Feb
1966, pp 921-927

"New phase in the system magnesium-sulfide."

HAJEK, F.; CERNY, J.

Czechoslovak "pencil-type" rectifiers. p. 91.
(Elektrotechnik, Vol. 12, no. 3, March 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 6,
June 1957. Uncl.

1980, 11. 12. 1980.

Changes in the upper respiratory system in workers in an acid and alkali mill of paper mills. Cesk. otolaryng. 13 no. 2:226-228 1980.

1. Ústav otolaryngologického omdelení (vedoucí MUDr. M. Vachík, Ph.D.) a
2. Ústav farmakologického lékařství (vedoucí MUDr. J. Hájek, Ph.D.)
nemocnice a polikliniku v Českých Budějovicích.

Vanclik, Karel; Hajek, Karel; Hajek, Jan

Effect of the environment in paper mills on the upper respiratory tract of the workers. Prac. lek. 16 no.8:366-369 1974.

1. otolaryngologické oddělení (vedoucí: MUDr. J. Vanclik, ČSc.) a
ordinární ambulance s poliklinikou (vedoucí: MUDr. J. Hajek) Krajské na-
emocnice s poliklinikou v Českých Budějovicích; Onomické oddělení
Krajské centrální laborator: Krajského ústavu národního zdraví
v Českých Budějovicích (vedoucí: MUDr. J. Hajek).

KLABOCH, L., inz.; DUFEK, Jaroslav, inz.; HAJEK, E., doc., inz.; REZNICEK, I., inz.; ROD, F., inz.; DRDA, J., inz.; MATOUSEK, B., inz.; KOUSAL, P., inz.; MANDA, V.; CAIS, O., inz.; NOVAK, S.; URBAN, S.; HANKE, M., inz.; VOKURKA, V., inz.; FOGL, J., inz.; HROMIR, M., inz.; SOLIN, J., prof., inz.; SLEZAK, A., inz.; TITLBACH, Z., inz.; DREXLER, J., inz.; HORNA, O., inz.; KUPEC, J., inz.

Discussion on tensiometry. Zpravodaj VZLU no.2:37-46, 69-80 '62.

1. Vyzkumny a zkusebni letecky ustav (for Dufek, Reznicek, Manda, Cais, Drexler and Kupec). 2. Statni vyzkumny ustav tepelne techniky (for Klaboch, Rod, Drda, Matousek, Titlbach). 3. Ceske vysoke uceni technicke (for Hajek, Solin). 4. Ustav pro vyzkum motorovych vozidel (for Hanke, Vokurka, Fogl, Hromir). 5. Vyzkumny ustav matematickych stroju (for Horna). 6. Moravan, n.p., Otrokovice (for Kousal). 7. Mikrotechna, Holesovice (for Novak). 8. Zavody V.I.Lenina (for Urban). 9. Svermovy zavody, Vyzkumny ustav (for Slezak).

HAJEK, F.
STRAKOS, O.

Stepping up time standards on the basis of sector output standards of the
Ministry of Heavy Machine Manufacture and Technical Management Research
Institute of the Machinery Industry. p. 101.

STROJIRENSKA VYROBA, Praha, Czechoslovakia, Vol. 7, no. 3, 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 7,
July 1959
uncla.

HAJEK, Frantisek, inz.

Pollution of city air by moters. Siln doprava 12 no. 4:4-7
Ap '64.

1. Research Institute of Transportation.

HAJEK, F., okleveles gépészmérnök, tudományos munkatárs (Prague)

Effect of the adjustment of the Otto engines on the carbon monoxide
content of exhaust gases. Kozl tud sz 15 no.1:23-28 Ja '66.

HAJEK, Frantisek, inz.

Carbon monoxide and gasoline motors. Siln doprava 12 no.12:2-5
D '64.

1. Research Institute of Transportation, Prague.

HAJEK, FRANTISEK

Hajek, Frantisek. "Nova zakonita ustanoveni v soudnim lekarstvi. (Vyd. 1.) Praha, Statni pedagogicke nakl., 1952. p. 56 (Ucebni texty vysokych skol) (New legal provisions in medical jurisprudence).

SO: Monthly List of East European Accessions, L. C. Vol. 3 No. 1 Jan. '54 Uncl.

HAJEK, F.

Certain problems of psychiatric hospitals. Neur. & psychiat. week.
(CML 25:5)
16 no.6:351-360 Nov 1953.

EXCERPTA MEDICA Sec 8 Vol 9/9 Neurology Sept ' 56

3760. HÁJEK F. and ROTH B. Neurol. Klin. KU, Praha. *Esenciální hereditární tremor. Minorova nemoc. Hereditary essential tremor.

Minor's disease ČSL NEUROL. 1956, 19/1 (59-63)

Three cases are presented. In all cases there was a proved family occurrence (in one case the patient's grandfather, in one the patient's father and his 5 brothers and sisters, in the last one the patient's father and niece), early appearance (before 20 yr. of age), a stationary course and lack of other signs. In one case there was found hydrocephalus of the 1st-IIIrd ventricle. From authors' summary

BLEHOVA, J.; DANESOVA, J.; GREC, L.; HAJEK, F.; MATOUSEK, M.; VOJTIK, V.

Occurrence of phenylketonuria in Bohemia & Moravia. Cesk. pediat.
14 no.6:499-502 5 June 59.

1. Detska klinika hygienicke fakulty v Praze, prednosta prof. J.
Pisarovicova-Gizkova Charita Praha, Stat. psych. lecebna Opava, Stat.
psych. lecebna Dobruška, Stat. psych. lecebna Opatowitz. J.B., Praha 12.
Srobarova 50.

(PHENYLKETONURIC OLIGOPHRENIA, epidemiol.
in Czech. (Cz))

MEDKOVA, L.; BERSKY, K.; BUBLIKOVA, D.; HAJEK, Fr.

Appearance of strabismus in children of mother with late pregnancy toxemia. Cesk. ofth. 15 no.4:254-257 Aug 59.

1. Očni oddeleni OUNZ v Opave, prednosta prim. dr. J. Stefek
Porodnicko-gynekologicke oddeleni OUNZ v Opave, prednosta prim. dr.
O. Sipek Detske oddeleni OUNZ v Opave, prednosta prim. dr. M. Zak
Psychiatricka lecebna v Opave, reditel dr. Fr. Hajek.
(STRABISMUS, etiol. & pathogen) (PREGNANCY TOXEMIAS, compl.)

HAJEK, Frantisek

Sub-professional medical worker in psychiatry. Cesk. psychiat. 55
no. 4: 217-224 June 59.

1. Psychiatricka lecebna v Opave.
(PSYCHIATRY)

HAJEK, Frantisek

Psychotic disorders after injuries of the central nervous system.
Cesk.psychiat.56 no.5:314-317 0'60.

1. Psychiatricka lecebna v Opave.
(CENTRAL NERVOUS SYSTEM wds & inj)
(PSYCHOSES etiol)

CZECHOSLOVAKIA

ENGELSMANN, F.; HAJEK, F.; HLOUNOVA, B.; MENCIKOVA, H.; Psychiatric Research Institute (Vyzkumny Ustav Psychiatricky), Prague.

"Time Samples of a Day of Psychiatric Patients."

Prague, Ceskoslovenska Psychiatrie, Vol 62, No 3, Jun 66, pp 168 - 175

Abstract /Authors' English summary modified/: In the period 1962 to 1964 the authors investigated the activities of hospitalized patients between 6 a.m. and 10 p.m. The patients spend most of their time in complete inactivity; the rehabilitation treatment occupies only a very small part of the day. On the basis of the study the authors were able to prepare a better program for the daily routine treatment of the patients. 3 Tables, 9 Czech references. (Manuscript received 2 Apr 65).

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HAJEK, GUSTAV.

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000617820004-3

Vodni motory; vodni energie a jeji vyuziti. Vodni dila, vodni kola a turbiny...
 [Vyd. 2., v Praci 1/ Praha, Prace; vydavatelstve ROH, 1951. 150 p. (Technicka
 prirucky Prace, av. 50) / Hydraulic motors; water power and its exploitation,
 water works, water wheels and turbines, installation and operation of turbines,
 hydroelectric plants. illus., bibl., index/

HASEK, Horymar, promovany ekonom, VYROUENI, Josef

Use of the machine operational time in the distribution of total
shop costs. Podn org 18 no.10:447-450 C '64.

1. Moravske zelezarny, Olomouc.

GUTMANN, E.; JAKOUBEK, B.; HAJEK, I.; ROHLICEK, V.; SKALOUD, J.

Effect of age on proteosynthesis in spinal motoneurons following nerve interruption as shown by histoautoradiography of S^{35} labelled methionine. Physiol. Bohemoslov. 11 no.5:437-442 '62.

1. Institute of Physiology, Czechoslovak Academy of Science, Prague.
(NEURONS) (SPINAL CORD) (METHIONINE)
(PROTEIN METABOLISM) (AGING)

JAKOUBEK, B.; GUTMANN, E.; HAJEK, I.; SYROVY, I.

Changes in protein metabolism of peripheral nerve during functional activity. Physiol. Bohemoslov. 12 no.6:553-561 '63.

1. Institute of Physiology, Czechoslovak Academy of Sciences, Prague.

(NERVE TISSUE PROTEINS) (PERIPHERAL NERVES)
(ELECTROPHYSIOLOGY) (SWIMMING)
(CHROMIUM ISOTOPES)

CZECHOSLOVAKIA

HAJEK, I.; KLICPERA, M.; Department of Physiology, Czechoslovak Academy of Sciences (Fysiologicky ustav CSAV), Prague.

"Protein Synthesis in Normal and Denervated Cat Muscle."

Prague, Ceskoslovenska Fysiologie, Vol 14, No 5, Oct 1965; p 347.

Abstract: Study of incorporation of radioactive methionine into contractile proteins, albumins, globulins and stromal proteins before and 7 days after denervation revealed that denervation decreases proteosynthesis in contractile proteins in favor of globulins and stromal tissue proteins. Graph, 4 Western, 2 Soviet and 1 Czech reference. Paper presented at the 15th Physiology Days, Olomouc, 27 May 65.

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CZECHOSLOVAKIA

SYROVY, I., HAJEK, I., GUTMANN, E.; Physiological Institute, Czechoslovak Academy of Sciences (Fysiologicky Ustav CSAV), Prague.

"Factors Influencing Proteolytic Activity in Denerved Muscle."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 110

Abstract: Proteolytic activity was determined by measuring the amount of substrate decomposed by muscle extract from a normal and a denerved muscle. As substrate denatured hemoglobin, glycyl-L-phenylalanyl-p-nitroanilid, leucine-p-nitroanilid and glycine-p-nitroanilid were used. The increased proteolytic activity shown by a denerved muscle is not due to a change in concentration of activators or inhibitors of proteolytic enzymes or to the release of bound lysosomal enzymes or to structural changes of muscle proteins, but probably is due to an increase in synthesis of active proteolytic enzymes. 2 Western, 3 Czech, 2 Russian references. Submitted at "16 Days of Physiology" at Kosice, 29 Sep 65.

1/1

HAJEK, I.; GUTMANN, E.; SYROVY, I.

Proteolytic activity and denervated and reinnervated muscle.
Physiol. Bohemoslov. 13 no.1: 32-38 '64.

1. Institute of Physiology, Czechoslovak Academy of Sciences,
Prague.

*

SYROVY, I.; HAJEK, I.; GUTMANN, E.

Proteolytic activity of isolated protein fractions in normal and denervated muscle. *Physiol. Bohemoslov.* 14 no.1:12-16 '65

Degradation of proteins of *M. latissimus dorsi* anterior and posterior of the chicken. *Ibid.*:17-22

1. Institute of Physiology, Czechoslovak Academy of Sciences, Prague.

HAJEK, J.

"Detectors of metals." p. 777.

STROJIRENSTVI. (MINISTERSTVO TEZKEHO STROJIRENSTVI, MINISTERSTVO PRFSNEHO
STROJIRENSTVI A MINISTERSTVO AUTOMOBILOVEHO PRUMYSLU A ZEMEDELSKYCH STROJU.)
Praha, Czechoslovakia, Vol. 5, no. 10, Oct. 1955.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.
Uncl.

HAJEK, J.

Influence areas of orthotropic plates.

P. 147, (Slovenska akademie vied. Ustav strobnictva a architektury. PRAHA, 1954
(Published 1956) Bratislava. Czechoslovakia)

Monthly Index of East European Accessions (EFAI) LC. Vol. 7, no. 2,
February 1958

HAJEK, Jan, ins. CSc.

Calculation of the system of ... associated by nings. Stav
cas 12. no. 7:369-390 1964.

1. Institute of Building and Architecture, Slovak Academy of
Sciences, Bratislava.

HASEK, Jan, inc. No.; HASEK, J. ger, inc.

Deformation process in the successive thermomechanical prestressing of concrete cylindrical shells. Stav cas 13 no.2:89-107 '65.

1. Institute of Building and Architecture of the Slovak Academy of Sciences, Bratislava. Submitted May 28, 1964.

HAJEK, J.

Use of concrete in reinforcement constructions in mines. p. 33.

Vol. 4, no. 2, Feb. 1956

RUDY

Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

HAJEK, J.

"International Glider Contest in Poland", P. 246, (KRIDLA VLASTI, No. 11, May 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

HAJEK, J.

Effect of the total number of ends in the warp on shrinkage of textile fabrics; problems of stretching viscose warps in weaving. p. 82. (Textil, Praha, Vol. 9, no. 3, Mar. 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, no. 6, June 1955, Uncl

HAFEK, J.

Causes of the breaking of crepe yarn with Z twist during the finishing of fabrics of artificial silk; also, remarks by A. Rozycki. p. 480.
(Przemysl Wlokienniczy, Vol. 10, No. 10, Oct. 1956, Krakow, Poland)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 8, Aug. 1957. Uncl.

HAJEK, J.

Possibilities for the use of radioisotopes in the textile industry. p. 150.

(Textil. Vol. 12, no. 4, Apr. 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

HAJEK, J.

"Coating papers."

PAPIR A CELULOZA. Praha, Czechoslovakia. Vol. 10, no. 2, Aug. 1955.

Monthly list of East European Accessions (EMAI), IC, Vol. 2, No. 6, Jun 59, Unclass

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and
Their Application. Cellulose and Derivatives.
Paper.

H

Abs Jour: Ref Zhur-Khim., No 13, 1958, 45354.

Author : Hajek J.

Inst :

Title : New Procedures of Manufacturing Coated Papers.

Orig Pub: Papir a celuloza, 1957, 12, No 12, 278-282.

Abstract: A brief account of the conventional methods is followed by a description of the new procedures used in manufacturing coated papers (preparation of coating compositions, their application to the paper, finishing, drying, conditioning).

Card : 1/1

Calculation of basic data for cycloidal teeth. Jemna mech opt 7
no.12:378-381 D '62.

1. OUVD Polna

HAJEK, J.

Example for other squads of locomotive engineers. p. 258.
ZELEZNICE, Prague, Vol. 4, no. 10, Oct. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

HAJEK, J.

Use of silon in some locomotive bearings. p. 9.
(ZELEZNICAR. Vol. 6, no. 1, Jan. 1956, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957.
Uncl.

ANTAL, J.; HAJEK, J.; SEDLAK, P.

Reflex modifications on respiratory metabolism in children. Cesk. fysiол.
7 no.3:178-179 May 58.

1. Fyziologicky ustav Lekarskej fakulty Komenskeho university v Bratislave.
(RESPIRATION, physiол.
reflex changes of resp. metab. in child. (Cz))

HAJEK, J.; SEDLAK, P.

Conditioned reflex modification of energy metabolism in man following work activity changes. Bratisl. Lek. Listy 42 no.2:654-664 '62.

1. Z Katedry fyziologie Lek. fak. Univ. Komenskeho v Bratislave, veduci clen koresp. SAV J. Antal, Dr. Sc.
(REFLEX CONDITIONED) (EXERTION) (METABOLISM)

HAJEK, J. (Havlickuv Brod)

Optimum dimensions of a substitute main-spring. Jemna mech opt
5 no.7:224-226 J1 '60.

CERNY, O., HAJEK J.

Radical formation in catalyzed oxidation of tetralin in the liquid phase. Coll Cz chem 29 no. 7:1643-1653 Ji '64.

1. Research Institute of Organic Syntheses, Pardubice-Hybitvi.

HAJEK, J. (Havlickuv Brod)

The clock mechanism Incastar. Jemna mech opt 6 no.2:65-66
F '61.

HAJEK, J. (Havlickuv Brod)

Watertight watch cases. Jemma mech opt 6 no.4:114-117 Ap '61.

(Clocks and watches)

HAJEK, J.

An automatic winding-up of wrist watches. Jemna mech opt 7 no.1:
23-27 Ja '62.

HAJEK, J.

A wrist alarm watch. Jemna mech opt 7 no.2:56-58 F '62.

HAJEK, J.

Lubricators for watchmakers. Jemna mech opt 8 no.4:115 Ap '63.

HAJEK, J.

Run regulation of pendulum clocks. Jemna mech opt 8 no. 7:
220-222 JI '63.

1. OUVD Polna.

CZECHOSLOVAKIA

HAJEK, J.; Physiological Institute, Medical Faculty, Comenius University (Fyziologicky Ustav Lek. Fak. Univerzity Komenskeho), Bratislava.

"Two-Phase Conditioned Reflex Changes in the Frequency of Heart Beat in Repeated Signalization of Muscle Work in Adults and Children."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 118

Abstract: 12 adults and 6 children were used in the investigation. Signal of heavy work evokes in adults a 2 phase reaction; for the first 3 to 5 seconds it increases the heart beat frequency; this is followed by a period of lowered frequency of the same duration. The period of lowered frequency may be extended to 20 seconds by an isolated signal action, and therefore a lower average frequency compared to original values is found. In children the higher heart beat frequency persists. 1 Russian reference. Submitted at "16 Days of Physiology" at Kosice, 29 Sep 65.

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S/124/63/000/003/042/065
D234/D308

AUTHOR: Hájek, Ján

TITLE: Application of the summation method to the design of plates

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1963, 17; abstract 3V111 (Stavebn. časop. 1962, v. 10, no. 4, 213-231 (Slovak.; summaries in Rus. and Eng.))

TEXT: The author considers the bending of a rectangular plate having two opposite edges freely supported by rigid bases. The problem reduces to an integral equation which is solved numerically by the trapezium method. /-Abstracter's note: Complete translation.-/

Card 1/1

HAJEK, Jan, inz., C.Sc.

Numerical solution of the state of stress of a circular cylindrical shell. Stav cas 11 no.1/2:53-71 '63.

1. Ustav stavebnictva a architektury, Slovenska akademia vied, Bratislava.

FRANCU, Dusan, inz.; HAJEK, Jan, inz., C.Sc.

Conference on reinforced concrete and prestressed bridges. Stav
cas 11 no.3:245-246 '63.

HAJEK, Jan, inz., CSc.

Solution of a circular cylindrical shell of variable thickness.
Stav cas 11 no.5:332-347 '63.

1. Ustav stavebnictva a architektury, Slovenska akademie vied,
Bratislava.

HAJEK, J., inz.

New technique in housebuilding in France. Pt.2. Stavice 43 no.
2:70 /1 '65.

HAJEK, Jan, inz. (Sc.

Calculation of the carrying capacity limit of a circular prestressed concrete ring subject to apex compression.
Inz stavby 12 no.11:506-508 N '64.

1. Institute of Building and Architecture of the Slovak Academy of Sciences, Bratislava.

HAJEK, Josef, inz.

Jan Kraus; obituary. Slevarenstvi 11 no.8/9:410-411 Ag '63.

HÁJEK, J.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
General and Physical Chemistry

Vapor-phase association of α -hydroxy acids and the energy of the hydrogen bond. Arnošt Rejzler, Arnošt Kříž, and Jaroslav Hájek (Výzk. úst. chem., Prague, Czech.). *Chem. Zpr.* 47, 1236-1243 (1963). 1100. wts. of MeOH:NOH (1), AcOH, MeOH, and toluene were dehd. by the classical Dumas method in the temp. range of 50° above the b.p. From the exptl. results, free energy, enthalpy, and entropy of assocn. of the first 3 compounds, were calcd. An interpretation in terms of mol. models was attempted. 1 assoc. in the gas phase almost exclusively to cyclic dimers (analogous to the dimeric form of carboxylic acids) bound by 2 hydrogen bonds O—H...N. The bond energy of the hydrogen bridge O—H...N is 8 kcal. B. Erdős

Hajek, Jaroslav,

Vapor-phase association of acetaldolime and the energy of
the hydrogen bond. ~~Arndt, Peter, Arndt, Klaus, and~~
~~Jaroslav Hajek (1954, Univ. Prague). Collection (Archiv)~~
~~Chem. Commun. 19, 4-14 (1954) (in German). See~~
~~C.A. 48, 4374b.~~ E. J. C.

CERNY, O.; HAJEK, J.

Relative reactivity of some alkylaromatic hydrocarbons in photo-
chemical chlorination. Coll Cz chem 26 no.2:478-484 F '61.
(EEAI 10:9)

1. Forschungsinstitut fur organische Synthesen, Pardubice-Rybitvi.

(Hydrocarbons) (Alkyl groups) (Aromatic compounds)
(Chlorination) (Photochemistry)

CERNY, O.; HAJEK, J.

Photochemical chlorination of n-hexane and 2,3 dimethylbutane with chlorine and certain chlorination reagents. Coll Cz Chem 26 no.10: 0 '61.

1. Forschungsinstitut fur organische Synthesen, Pardubice-Rybitvi.

CERNY, O.; ~~HAJEK, J.~~

Kinetics of the catalytic tetraline oxidation in the acetic acid medium. Coll Cz Chem 28 no.2:494-503 F '63.

1. Forschungsinstitut fur organische Synthesen, Pardubice - Rybitvi.

L 31234-66

ACC NR: AP6022773

SOURCE CODE: CZ/0039/66/027/001/0037/0042

AUTHOR: Hajek, Jarosláv (Doctor; Engineer); Bulka, Miroslav (Engineer)

ORG: Instrument Engineering Institute, CSAV, Brno (Ustav pristrojove techniky CSAV)

TITLE: Compensating the temperature dependence of the voltage in stabilizing glow lamps

SOURCE: Slaboproudý obzor, v. 27, no. 1, 1966, 37-42

TOPIC TAGS: temperature dependence, glow lamp, temperature stabilization, thermistor, circuit design

ABSTRACT: A theoretical analysis and experimental results are given on compensating the temperature dependence of the working voltage in a stabilizer glow lamp by means of a novel circuit using a thermistor. The influence of temperature has been lowered by one order, without the use of a thermostatic oven, and the temperature time constants of the circuit as a whole have been shortened. Graphs are presented to facilitate the designing of the circuit. Orig. art. has: 9 figures and 9 formulas. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 09, 20 / SUBM DATE: 07Jun65 / ORIG REF: 009 / OTH REF: 006

Card 1/1 BLG

UDC: 621.316.722.1: 621.387

HAJEK, J.

Generalization of an inequality of Kolmogorov. in English. p. 281
Vol. 6, no. 3/4, 1955.

so: East European Accessions List Vol. 5, No. 7, July 1956.

HÁJEK, JAROSLAV

Hájek, Jaroslav. Some rank distributions and their applications. Časopis Pěst. Mat. 80 (1955), 17-31.

(Czech. Russian and English summaries)

The random variables α , β , γ are defined as follows:

Let A_i ($i=1, 2, \dots, 2^N$) be all different subsets of $\{1, 2, \dots, N\}$, each having the same probability 2^{-N} ;

denoting by A one of these subsets obtained at random, define α as the sum of the numbers in A . Similarly, let

P_j ($j=1, 2, \dots, N!$) be all permutations of $\{1, 2, \dots, N\}$, each having the same probability $(N!)^{-1}$; denoting by

P one of them obtained at random, define γ as the number of inversions in P . Let C_k ($k=1, 2, \dots, \binom{N}{n}$) be all

combinations of n elements from $\{1, 2, \dots, N\}$, each having probability $\binom{N}{n}^{-1}$; denoting by C one of these

combinations obtained at random, define β as the number of inversions between C and its complement in $\{1, 2, \dots, N\}$.

— The probability distributions of these random variables are studied, also asymptotically for N large, and used for constructing tests of various hypotheses, some known (e.g. the Wilcoxon-Mann-Whitney test) and some new.

Z. W. Birnbaum (Seattle, Wash.)

HÁJEK, J.

Some basic problems of mathematical statistics. P. 387
CASOPIS PRO PESTOVANI MATEMATIKY Czechoslovakia Vol. 60,
No. 4, Nov. 1955

SOURCE: EEAL IC Vol. 5, no. 7, July 1956

Hájek, Jaroslav

Hájek, Jaroslav. The asymptotic efficiency of a certain sequence of tests. Czechoslovak Math. J. 6(61) (1956), 26-30. (Russian. English summary)

Let $X_1, \dots, X_n$ be n identically and independently distributed chance variables and $k < n$. The α_k -test is defined by $\alpha_k = \sum_{1 \leq i_1 < \dots < i_k \leq n} \varphi(X_{i_1}, \dots, X_{i_k})$, where $\varphi(x_1, \dots, x_k) = 1$ or 0 depending on whether $x_1 + \dots + x_k > C$ or not. The asymptotic efficiency (in the sense of Pitman) of the α_k -test with respect to the t -test (assuming normality) is found to be $e_k = (k \arcsin 1/k)^{-1}$. For $k=1$, we have the sign test with asymptotic efficiency $2/\pi$. Further, $e_2 = 3/\pi$. It turns out that $\alpha_1 + \alpha_2$ is Wilcoxon's signed rank test having the same asymptotic efficiency as α_1 . (It would appear from the paper that the author is not aware of Wilcoxon's work). G. E. Noether (Boston, Mass.).

Hájek, Jaroslav

✓ Hájek, Jaroslav. Remark on the article "On certain sequences of sets of points on a circle". Časopis Pěst. Mat. 81 (1956), 77-78. (Czech)

The author gives a shorter proof of the result (i) of the paper reviewed above by showing: if $a_i^{(k)}$ ($i=0, \dots, n-1$) are n sequences of real numbers defined recursively by

$$a_i^{(k+1)} = (1-b)a_i^{(k)} + ba_{i+1}^{(k)},$$

where $0 < b < 1$ and $a_n^{(k)} = a_0^{(k)}$, then

$$\lim_{k \rightarrow \infty} a_i^{(k)} = \sum_{m=0}^{n-1} a_m^{(1)} / n.$$

The author also observes that the result follows directly from the theory of Markov chains.

F. A. Böhrend.

F/W

2

1/1

HÁJEK, JAROSLAV

16
Hájek, Jaroslav Linear estimation of the mean value of a stationary random process with convex correlation function. Czechoslovak Math. J. 6(81) (1956), 94-117. (Russian. English summary)

Let $x(t)$ be a stationary process with correlation function

$$R(\tau) = \frac{Ex(t)x(t+\tau) - [Ex(t)]^2}{Ex^2(t) - E[x(t)]^2}$$

A linear estimate for $Ex(t)$ over the interval $(0, T)$ is $\bar{x} = \int_0^T x(t) d\Phi(t)$, where $\Phi(t)$ is a function of bounded variation with $\Phi(0)=0$ and $\Phi(T)=1$. The main result of the paper is to give a lower bound for the variance of such an estimate in the case that $R(\tau)$ is a convex (downward) function. Specifically it is proved in this case that

$$\liminf_{T \rightarrow \infty} T D^2 \left[\int_0^T x(t) d\Phi_T(t) \right] \geq 2\sigma^2 \int_0^\infty R(\tau) d\tau.$$

The author also obtains results relating to the best estimate (minimum variance) over a fixed interval. Several examples are given.

J. L. Snell.

HAJEK, J.

Theory of ratio estimates. p. 384.

APLIKACE MATEMATIKY: (Ceskoslovenska akademie ved. Matematicky ustav) Praha,
Czechoslovakia. Vol. 3, no. 5, 1958.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 12, December 1959
Uncla.

✓ Háček, Jaroslav. A property of J -divergences of marginal probability distributions. Czechoslovak Math. J. 8(83) (1958), 460-463. (Russian summary)

2
1-F/W

Consider two arbitrary probability distributions P and Q on a Borel field F of subsets Λ of a space $\Omega = \{\omega\}$, and let P_a and Q_a , $a \in A$, be corresponding "marginal" distributions on Borel sub-fields $F_a \subset F$, defined by $P_a(\Lambda) = P(\Lambda)$, $Q_a(\Lambda) = Q(\Lambda)$ for $\Lambda \in F_a$, $a \in A$. J -divergence J_a between distributions P and Q on the Borel field $F_a \subset F$ is the number

$$J_a = \int \left(\frac{p_a}{q_a} - 1 \right) \log \frac{p_a}{q_a} dQ \text{ if } P_a \equiv Q_a,$$

$$J_a = \infty \text{ if } P_a \not\equiv Q_a,$$

where $P_a \equiv Q_a$ denotes that $[Q(\Lambda) = 0] \Leftrightarrow [P(\Lambda) = 0]$ for $\Lambda \in F_a$, and $p_a/q_a = dP_a/dQ_a$ is the Radon-Nikodym derivative of P_a with respect to Q_a . This definition is that of Kullback and Leibler [Ann. Math. Statist. 22 (1951), 79-86; MR 12, 623] extended to the case when $P_a \not\equiv Q_a$ and is a form introduced by Jeffreys [Proc. Roy. Soc. London, Ser. A. 186 (1946), 453-461; MR 8, 163]. The author proves that the J -divergence of any two probability distributions of any stochastic process equals the supremum of J -divergences of finite-dimensional marginal distributions. If this supremum is finite then the distributions are absolutely continuous with respect to each other. S. Kullback (Washington, D.C.)

✓ Hájek, Jaroslav. Predicting a stationary process when the correlation function is convex. Czechoslovak Math. J. 8(83) (1958), 150-154. (Russian summary)

Let x_t , $-\infty < t < \infty$ be a wide sense stationary process with known mean μ , variance σ^2 and correlation function R_τ . Consider the linear predictor

$$\text{Pred } x_{t+\Delta} = \mu + \sum_{i=1}^n a_i (x_{t_i} - \mu), \quad t_1 < \dots < t_n = t + \Delta, \quad n \geq 1.$$

The author proves that if R_τ is convex then the residual variance for this predictor satisfies the inequality

$$D(x_{t+\Delta} - \text{Pred } x_{t+\Delta}) \geq \sigma^2(1 - R_\Delta).$$

Since the variance for the best linear prediction based only on x_t is $\sigma^2(1 - R_\Delta^2)$ this shows that in the case of a convex correlation function the relative reduction of the

residual variance attainable by making use of any number of preceding observations, cannot exceed 50%.

J. L. Snell (Palo Alto, Calif.)

SW

HAJEK, J.

"Simple algebraic stability conditions." p. 176.

SLABOPROUDY OBZOR. (MINISTERSTVO PRESNEHO STROJIRENSTVI, MINISTERSTVO SPOJU A VEDECKA TECHNICKA SPOLECNOST PRO ELEKTROTECHNIKU PRI CSAV.) Praha, Czechoslovakia, Vol. 20, no. 3, Mar. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.
Uncl.

HAJEK, Jaroslav (Praha)

Optimum strategy and other problems in probability. Cas pro pest mat
84 no.4:387-425 '59 (EBAI 9:3)
(Probabilities) (Sampling (Statistics))

HAJEK, Jaroslav (Prague)

Limiting distributions in simple random sampling from a finite population. In English. Mat kut kozl MTA 5 no.3:361-374 '60.
(EEAI 10:8)

1. Mathematical Institute of the Czechoslovak Academy of Sciences,
Prague.

(Distribution(Probability theory))

(Sampling(Statistics)) (Probabilities) (Convergence)

16.610 D

25016

S/052/61/006/002/003/006
C111/C222

AUTHOR: Hajek, Jaroslav

TITLE: On linear estimation theory for an infinite number of observations

PERIODICAL: Teoriya veroyatnostey i yeye primeneniye, v.6, no.2, 1961, 182-193

TEXT: Let A_m - m-dimensional vector space ; T - arbitrary set ;
 $\alpha = (\alpha_1, \dots, \alpha_m) \in A_m$; $\varphi_{1t}, \dots, \varphi_{mt}$ - m - known functions of
 $t \in T$. The author considers : a family of random variables $\{x_t, t \in T\}$
and the system of probability distributions of this family $P_\alpha(\cdot)$,
 $\alpha \in A_m$, with the following first and second moments

$$E_\alpha x_t = \sum_{y=1}^m \alpha_y \varphi_{yt} \quad (\alpha \in A_m, t \in T) \quad , \quad (2.1)$$

$$E_\alpha x_t \overline{x_s} = E_0 x_t \overline{x_s} + E_\alpha x_t E_\alpha \overline{x_s} \quad (\alpha \in A_m ; t, s \in T) \quad , \quad (2.2)$$

Card 1/40